

WHAT IS CLAIMED IS:

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1. An image data correcting device comprising:

detecting means for detecting an intensity difference between first image data corresponding to a part of a predetermined small area and second image data corresponding to the remaining parts of the predetermined small area;

determining means for determining whether the first image data corresponds to a halftone image; and

15 intensity changing means for changing an intensity of the first image data to a predetermined low intensity, when the intensity difference is equal to or smaller than a first predetermined value and the first image data does not correspond to the halftone image and

20 the intensity of the first image data is equal to or smaller than a second predetermined value.

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2. The image data correcting device as
claimed in claim 1, wherein the first predetermined
value is determined so that an intensity of at least a
part of an image other than the halftone image is equal
5 to or greater than the first predetermined value and an
intensity of the halftone image is smaller than the
first predetermined value.

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3. The image data correcting device as
claimed in claim 1, wherein the second predetermined
value is determined so that a difference between a first
15 intensity difference of the first image data is equal to
or greater than the second predetermined value when the
first image data corresponds to the halftone image,
wherein the first intensity difference is a difference
between the intensity of the first image data and an
20 average in intensities of the first image data and the
second image data.

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4. The image data correcting device as
claimed in claim 1, wherein the predetermined small area
is defined by a pixel matrix, and the first image data
corresponds to one of pixels located in the center of
5 the pixel matrix.

10 5. The image data correcting device as
claimed in claim 4, wherein the pixel matrix is a 3×3
matrix.

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6. The image data correcting device as
claimed in claim 1, wherein the predetermined low
intensity is equal to or smaller than an intensity of a
20 background of an image from which the predetermined
small area is extracted.

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7. The image data correcting device as
claimed in claim 1, further comprising smoothing means
for smoothing the first image data after the intensity
of the first image data is changed.

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8. The image data correcting device as
10 claimed in claim 7, further comprising selecting means
for selecting whether to output the first image data
before smoothing or after smoothing.

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9. The image data correcting device as
claimed in claim 8, wherein the selecting means selects
the first image data after smoothing when the first
20 image data corresponds to an image other than the
halftone image, and selects the first image data before
smoothing when the first image data corresponding to the
halftone image.

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10. An image reading device comprising:
scanning means for scanning an original
document to obtain image data and converting the image
data into digital form; and

5 an image data correcting device correcting the
image data supplied by the scanning means,
wherein the image data correcting device
comprising:

detecting means for detecting an intensity
10 difference between first image data corresponding to a
part of a predetermined small area and second image data
corresponding to the remaining parts of the
predetermined small area;

determining means for determining whether the
15 first image data corresponds to a halftone image; and
intensity changing means for changing an
intensity of the first image data to a predetermined low
intensity, when the intensity difference is equal to or
smaller than a first predetermined value and the first
20 image data does not correspond to the halftone image and
the intensity of the first image data is equal to or
smaller than a second predetermined value.

11. An image forming apparatus comprising:
an image reading device generating image data
by scanning an original document, said image reading
device including an image data correcting device
5 correcting the image data supplied by the image reading
device; and
an image forming device forming a visible
image based on the corrected image data supplied by the
image data correcting device,
10 wherein the image data correcting device
comprising:
detecting means for detecting an intensity
difference between first image data corresponding to a
part of a predetermined small area and second image data
15 corresponding to the remaining parts of the
predetermined small area;
determining means for determining whether the
first image data corresponds to a halftone image; and
intensity changing means for changing an
20 intensity of the first image data to a predetermined low
intensity, when the intensity difference is equal to or
smaller than a first predetermined value and the first
image data does not correspond to the halftone image and
the intensity of the first image data is equal to or
25 smaller than a second predetermined value.